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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/766,493

01/27/2004

David H. Stark

STRK-26,581

3487

25883 7590 03/15/2007
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EXAMINER

KWIECINSKI, RYAN D

ART UNIT

PAPER NUMBER

3635

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/15/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/766,493	STARK, DAVID H.	
	Examiner	Art Unit	
	Ryan D. Kwiecinski	3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 1-17 and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-20 and 22-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/6/2005; 5/18/2005; 4/30/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The amendment received February 19, 2007 has been entered and considered. Applicant's election without traverse of Species I in the reply filed on 2/19/2007 is acknowledged. Claims 1-17 and 21 are withdrawn. Claims 18-20 and 22-24 were examined in this office action.

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

The disclosure is objected to because of the following informalities:

Applicant needs to update the "Cross Reference to Related Application" section of the Specification.

Appropriate correction is required.

Claim Objections

Claim 22 is objected to because of the following informalities:

Claim 22 recites the limitation "the rough-in framing structure of a building" in line

2. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 18-20 and 24 rejected under 35 U.S.C. 102(b) as being anticipated by US 2,220,690 to Stupakoff.

Claim 18:

Stupakoff teaches a hermetically sealed multi-pane window assembly comprising:

a spacer (2, Fig.1) having a continuous sidewall (bottom of the U-shaped frame member, Fig.2) circumscribing and thereby defining an aperture (hole in between panes, Fig.2) therethrough, the sidewall having an upper sealing surface (surface in contact with pane 3, Fig.2) and a lower sealing surface (surface in contact with pane 4, Fig.2);

the upper sealing surface being disposed on the upper side of the sidewall and continuously circumscribing the aperture;

the lower sealing surface being disposed on the lower side of the sidewall and continuously circumscribing the aperture;

a first and a second transparent windowpane sheets (3,4, Fig.2), the first sheet being disposed over at least a part of the upper sealing surface continuously around the aperture and the second sheet being disposed over at least a part of the lower sealing surface continuously around the aperture, thereby defining a cavity (hole between the panes, Fig.2) enclosed by the sidewall and the windowpane sheets; and

the first and second transparent windowpane sheets being each hermetically bonded to the spacer without non-hermetic adhesives to form a continuous hermetic joint around the aperture (Column 2, lines 28-30).

Claim 19:

Stupakoff teaches a hermetically sealed multi-pane window assembly in accordance with claim 18, wherein the hermetic bonds between the first and second transparent windowpane sheets are diffusion bonds (Column 2, lines 13-29).

Claim 20:

Stupakoff teaches a hermetically sealed multi-pane window assembly in accordance with claim 19, Stupakoff teaches further comprising:

an interlayer formed of a material different from the material of the spacer and the material of either windowpane sheet, the interlayer being disposed between the sealing surface of the spacer and at least one of the windowpane

sheets prior to diffusion bonding and being incorporated into the hermetic joint after bonding (Column 2, lines 24-26).

Claim 24:

Stupakoff teaches a hermetically sealed multi-pane window assembly comprising:

n spacer(s) (2, Fig.2), where $n \geq 1$, each spacer having a continuous sidewall (bottom of the U-shaped frame member, Fig.2) circumscribing and thereby defining an aperture (hole in between panes, Fig.2) therethrough, having an upper sealing surface (surface in contact with pane 3, Fig.2) and a lower sealing surface (surface in contact with pane 4, Fig.2);

the upper sealing surface being disposed on the upper side of the sidewall and continuously circumscribing the aperture;

the lower sealing surface being disposed on the lower side of the sidewall and continuously circumscribing the aperture;

(n + 1) transparent windowpane sheets (3,4, Fig.2), the sheets being interleaved with the spacers such that one spacer lies between each consecutive sheet, the spacers being disposed to have at least a part of the upper sealing surface overlapping one of the adjacent sheets continuously around the aperture, and at least a part of the lower sealing surface overlapping the other adjacent sheet continuously around the aperture, thereby defining a plurality of cavities

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(hole between the panes, Fig.2) enclosed by the sidewalls and the adjacent windowpane sheets; and

all of the transparent windowpane sheets being hermetically bonded to the adjacent spacers without non-hermetic adhesives to form continuous hermetic joints around each aperture (Column 2, lines 28-30)..

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2,220,690 to US 5,014,466 to Winner in view of 2,220,690 to Stupakoff.

Claim 22:

Winner teaches a window unit for installation in a building, comprising:
a unit frame (12,13,14,15, Fig.1) adapted for installation into the rough-in framing structure of a building during construction; and
at least one hermetically sealed multi-pane window assembly (Column 5, lines 55-61), the window assembly being mounted into the unit frame (Fig.1).

Winner does not teach the multi-pane assembly in accordance with claim 18, but Stupakoff teaches the multi-pane assembly in accordance with claim 18 (See claim 18 rejection above). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have placed Stupakoff's glass and metal construction unit (Column 1, lines 1-5) into Winner's double hung window assembly in order to form a double hung window with glass panes that have been hermetically sealed without non-hermetic adhesives. The hermetic bond in Stupakoff's construction unit has a much stronger bond, as well as a greater resistance to temperature changes.

Claim 23:

Winner and Stupakoff teach a window unit for installation in a building in accordance with claim 22, Winner teaches wherein the unit frame is a double-hung window unit (10, Fig.1)including:

an exterior frame/rail assembly (12,13,14,15, Fig.1); and

two window frames (17,20, Fig.1), each frame being independently slidably mounted to the frame/rail assembly (Column 1, lines 25-30) and carrying one hermetically sealed multi-pane window assembly therein (Column 5, lines 55-61).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan D. Kwiecinski whose telephone number is

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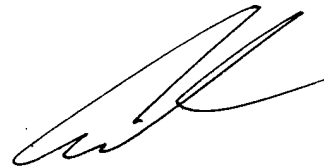
(571)272-5160. The examiner can normally be reached on Monday - Friday from 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Friedman can be reached on (571)272-6842. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



RDK



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